

Curriculum Vitae

Noga Alon

Personal

Born 1956, Haifa, Israel. Married, 3 daughters.

Citizenship: Israel.

Affiliation

Full Professor and Incumbent of the Florence and Ted Baumritter Combinatorics and Computer Science Chair, Schools of Mathematics and Computer Science, Tel Aviv University, Ramat Aviv, Tel Aviv 69978, Israel

Publications

More than 450 research papers, mostly in Combinatorics and Theoretical Computer Science; many of them with coauthors. One book, coauthored by J. H. Spencer: *The Probabilistic Method* (Wiley, 1992, Second Edition 2000, Third Edition 2008). Two patents.

Education, degrees

Ph.D. in Mathematics, 1983, Hebrew University of Jerusalem.

M. Sc. in Mathematics (summa cum laude), 1980, Tel Aviv University.

B. Sc. in Mathematics (summa cum laude), 1979, Technion.

Awards, honors

1974: Mathematics Youth Olympics, first place, Weizmann Institute of Science.

1974: Grossman Contest in Mathematics, first place, Technion.

1976,77,78: Annual Prizes for outstanding academic achievements, Technion.

1977: Yuval Levi Prize, Technion.

1982: Yashinsky Prize, Hebrew University.

1983,84: Weizmann Fellowship for Scientific Research, Weizmann Institute of Science.

1984: Israel Security Prize (co-recipient with team colleagues).

1985,86,87: Allon Fellowship, Israel.

1987: The best conference paper, 7th ICDS, Berlin.

1989: Erdős Prize, Israel.

1991: Feher Prize, Israel.

1997: Member of the Israel National Academy of Sciences.

2000: Polya Prize, SIAM, USA.

2001: Bruno Memorial Award, Israel.

2005: Landau Prize, Israel.

2005: The EATCS-ACM Gödel Prize.

2008: The Israel Prize in Mathematics.

2008: Member of the Academia Europaea.

Grants

1980: A grant for distinguished graduate students, Tel Aviv University.

1981,82: Grants for distinguished graduate students, Hebrew University.
1986,87: Bat Sheva de Rothschild grant.
1986-88, 1992-95, 1995-98, 1998-2001, 2001-2005 and 2005-2009: Grants from the Israel Science Foundation.
1987-90, 1991-94, 1995-98, 1998-2001, 2001-2004, 2005-2009 and 2009-2013: Grants from the United States Israel Binational Science Foundation.
1987,88,90: Bergmann Memorial grant.
2008-2013: ERC Advanced grant.

Academic and Professional Experience

1988- : Full Professor and permanent member, Department of Mathematics, Tel Aviv University.
1999-2001 : Head, School of Mathematical Sciences, Tel Aviv University.
1986-88: Assoc. Professor and permanent member, Department of Mathematics, Tel Aviv University.
1985-86: Senior Lecturer, Department of Mathematics, Tel Aviv University.
1984-85: Visiting Assistant Professor, Department of Mathematics, MIT.
1983-84: Postdoc Fellow, Department of Mathematics, MIT.

Other visiting positions:

Mathematics Research Center, AT& T Bell Laboratories, Murray Hill, NJ, 1984, 3 months and 1993, 94, 95, 96 two months each year.
IBM Research Laboratory, San Jose, CA, 1985, 2 months.
Mathematics Research Center, BellCore, Morristown, NJ, 1985,86,87,88,89,91,92; 3 months each year.
IBM Almaden Research Center, San Jose, CA, Sep. 89- Aug. 90.
Institute for Advanced Study, Princeton, NJ, Fall 93-94, Feb. 95, Fall 96-97, Fall and Spring 97-98, Feb. 2000, Spring 2001-02, Feb. 2003, Feb. 2004, Spring 2004-05, Spring 2005-06, Spring 2007-08 and Fall 2008-09.

Several short term visiting positions at universities and research centers in USA, Canada, France and Sweden including MIT, University of Chicago, Courant Institute, University of Waterloo, IHES, KTH, AT & T Shannon Labs and Microsoft Research.

Editorial Boards of International Journals

Journal of Combinatorial Theory, Ser. B., 1987-
Graphs and Combinatorics, 1987-
SIAM Journal on Discrete Mathematics, 1988-1995.
Israel Journal of Mathematics, 1988-
Journal of Graph Theory, 1989-
Discrete Applied Mathematics, 1989-
Random Structures and Algorithms, 1990- (Editor in Chief, 2008-)
Geometric and Functional Analysis, 1991-
Journal of Algebraic Combinatorics, 1992-2009.
Combinatorics, Probability and Computing, 1992-

Combinatorica, 1992-
Electronic Journal of Combinatorics, 1994-
SIAM Monographs on Discrete Mathematics and Applications, 1997-
Annals of Combinatorics, 1997-
Internet Mathematics, 2002-
Theory of Computing, 2004-
Computer Science Review, 2006-
Journal of the AMS, 2007-
Journal of Combinatorics, 2010-

Special Lectures

More than hundred invited and plenary addresses in various conferences in Mathematics and Computer Science, including plenary addresses in the 1996 European Congress of Mathematics in Budapest, Hungary and in the 2002 International Congress of Mathematicians in Beijing, China, a 45 minutes invited talk in the 1990 International Congress of Mathematicians in Kyoto, Japan, and plenary addresses in the 2005 Asian Mathematical Conference in Singapore and in the 2009 Latin American Congress of Mathematicians in Santiago, Chile.

Numerous conference papers selected by program committees including papers in the 25th, 26th, 27th, 28th, 29th, 31st, 32nd, 33rd, 34th, 35th, 36th, 37th, 40th, 41st, 42nd, 43rd, 46th, 48th, 49th and 50th IEEE FOCS Conferences, papers in the 17th, 21st, 22nd, 25th, 26th, 28th, 29th, 34th, 35th, 36th, 37th, 38th and 39th ACM STOC Symposia, papers in the 3rd, 5th, 8th, 9th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th and 21st ACM-SIAM SODA Conferences, papers in the 3rd, 8th, 9th, 22nd and 24th ACM Symposia on Computational Geometry and papers in the 18th, 20th and 24th PODS Symposia.

Numerous colloquium and seminar lectures in universities and research institutes in Europe and the USA.

Several mini-courses including one on the Probabilistic Method at the Euler Institute for Discrete Mathematics and its Applications in Eindhoven, the Netherlands in 1999 and one on New Methods in Combinatorics at the Alpe d'Huez, France in 2000.

Many distinguished lectures and named lecture series including a lecture at the KAM colloquium at Prague in 1995, a lecture at the "Mathematics in Science and Society" distinguished lecture series at the University of Illinois at Urbana-Champaign in 1996, a distinguished lecture at the Institute for Advanced Study at Princeton in 1997, a talk at the IBM Director's series in Yorktown Heights in 1998, a DIMACS Distinguished Lecture at Princeton, New Jersey at 1998, distinguished lectures in Budapest in 1999 and in Vancouver in 2000, the tercentennial Lecture on Discrete Mathematics at Yale, New Haven in 2001, the Coble Lectures at the University of Illinois at Urbana Champaign in 2002, the Rademacher Lectures at the University of Pennsylvania in 2002, the annual Chaim Pekeris Memorial Lecture at the Weizmann Institute in 2002, a lecture in the Applied Math Distinguished Lecture Series at Princeton in 2003, the Mordell Lecture in Cambridge University in 2004, the Erdős Memorial Lecture in Memphis University in 2005, the Simons Lectures in MIT in 2005, the Euler Lecture in Potsdam in 2006, the Aisenstadt Lectures in Montreal in 2006 and the Turán Memorial Lectures in Budapest in 2009.

Students

Supervised nineteen Ph.D. students: Y. Azar (graduated 1989), U. Zwick (graduated 1989), Z. Gutin (graduated 1993), R. Yuster (graduated 1994), M. Krivelevich (graduated 1997), B. Sudakov (graduated 1999), E. Fischer (graduated 1999), A. Zaks (graduated 2002), T. Kaufman (graduated 2005, joint supervision with M. Krivelevich), V. Asodi (graduated 2006), A. Shapira (graduated 2006), E. Lubetzky (graduated 2007), U. Stav (graduated 2007), D. Hefetz (graduated 2008, joint supervision with M. Krivelevich), S. Gutner (graduated 2009, joint supervision with Y. Azar), I. Ben Eliezer (in progress), R. Hod (in progress), A. Weinstein (in progress), and O. Feldheim (in progress) in Tel Aviv University.

Supervised fifteen M. Sc. students (U. Zwick, Y. Ravid, Z. Bregman, I. Algor, R. Yuster, B. Sudakov, E. Fischer, A. Zaks, E. Halperin, O. Nechushtan, V. Asodi, A. Shapira, U. Stav, R. Hod, A. Weinstein) in Tel Aviv University.

Other professional activities

Scientific committee of the IPAM special term on Combinatorics: Methods and Applications in Mathematics and Computer Science, UCLA, September-December 2009.

Committee of the 2010 König Prize.

Committee of the 2009 European Prize in Combinatorics.

Scientific Committee, The State of Geometry and Functional Analysis, Tel Aviv University, 2009.

Co-organizer, Oberwolfach workshop on Combinatorics and Probability, 2009.

Guest editor (with B. Bollobás and I. Wegener) of Combinatorics, Probability and Computing, Volume 18, (2009).

Review committee, Department of Computer Science, ETH, Zürich, 2008.

Member, the 2007 EMET Prize committee.

Co-organizer, the 13th International Conference on Random Structures and Algorithms, Tel Aviv, Israel, 2007.

Chairman of the Program Committee, International Congress of Mathematicians, Madrid, Spain, 2006.

Co-organizer, Oberwolfach workshop on Combinatorics, Probability and Computing, 2006.

Member of the organizing Committee of the Special semester on Combinatorial Optimization at the CRM, Montreal, 2006.

Co-organizer, DIMACS conference on Probabilistic Combinatorics and Algorithms, April 2006.

Program Committee, International Congress of Applied Mathematics, Santiago, Chile, 2006.

Member, the 2006 Fulkerson Prize committee.

Advisory committee of the special term on Probability, Algorithms and Statistical Physics in MSRI, Berkeley, CA, 2005.

Head Juror, The 2004 Rado Prize, Switzerland.

Program Committee, RANDOM 2004, Harvard, MA.

Program Committee, European Congress of Mathematics, Stockholm, 2004.

Program Committee, Eurocomb 2003, Prague.

Review committee, Department of Mathematics, Ben-Gurion University of the Negev, 2001.

Board of governors, Technion, 2000-

Co-editor (with J. Bourgain, A. Connes, M. Gromov and V. Milman) of Visions in Mathematics, Towards 2000, Vol. I and II, Birkhäuser, 2000.

Prize Committee for the European Mathematical Society Prizes, 2000.

Scientific Committee, Special Year on Graph Theory and Combinatorial Optimization, The Fields Institute, Toronto, Canada, 1999-2000.

Organizing Committee, Visions in Mathematics, Tel Aviv, 1999.

Program Committee, RANDOM 1999, Berkeley, CA.

Board of governors, Tel Aviv University, 1999-2000.

Co-organizer, IAS-DIMACS Workshop on Randomized and Derandomized Methods for Discrete Structures, Princeton, New Jersey, 1998.

Organizer, Hungarian-Israeli Erdős Workshop on Discrete Mathematics, Jerusalem, 1998.

Organizing Committee, 20 years of Wolf Prizes, Jerusalem, 1998.

Organizing Committee, Combinatorics- Algebraic, Geometric and Probabilistic Aspects, San Feliu de Guixols, Spain, 1997.

Organizer, DIMACS Workshop on Probabilistic Methods in Discrete Mathematics, New Jersey, 1996.

Organizer, The Combinatorics session in the AMS-IMU conference in Jerusalem, May 1995.

Co-Organizer, Special term in Combinatorial and Computational Geometry in Tel Aviv University, Spring 1995.

Advisory Board, What's Happening in the Mathematical Sciences, Vol. 2, 1994 and Volume 3, 1995-96.

Organizing and Program Committee, The Coding and Information Integrity workshop, Tel Aviv, 1994.

Organizing Committee, Jerusalem Combinatorics 93, Jerusalem, 1993.

Program Committee, The 2nd Israel Symposium on Theory of Computing and Systems, Israel, 1993.

Guest editor (with A. S. Fraenkel, M. C. Golumbic and E. Shamir) of Discrete Mathematics, Volume 114 (1993); *Combinatorics and Algorithms*.

Program Committee, The 24th ACM STOC, Canada, 1992.

Organizing Committee, The French-Israeli Conference on Combinatorics and Algorithms, Jerusalem, 1988.

Organizer of the Combinatorics Session, The Israeli Math. Soc. meeting, Tel Aviv, 1986 and Jerusalem, 1991.

Research interests

Combinatorics, Graph Theory and their applications to Theoretical Computer Science. Combinatorial algorithms, Streaming algorithms and circuit complexity. Combinatorial geometry and Combinatorial number theory. Algebraic and probabilistic methods in Combinatorics.